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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,284	04/08/2004	Ricky Ah-Man Woo	9600	8621

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THE PROCTER & GAMBLE COMPANY
Global Legal Department - IP
Sycamore Building - 4th Floor
299 East Sixth Street
CINCINNATI, OH 45202

EXAMINER

YOO, REGINA M

ART UNIT	PAPER NUMBER
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1797

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08/12/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/820,284	Applicant(s) WOO ET AL.	
	Examiner REGINA YOO	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-15 and 17-128 is/are pending in the application.
 4a) Of the above claim(s) 21-126 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-15, 17-20, 127 and 128 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/11/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

FINAL ACTION

Response to Amendment

The amendment filed on 5/12/2008 has been received and claims 1-8, 10-15 and 17-128 are pending.

Election/Restrictions

1. Claims 21-126 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected groups, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 11/05/2007.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 128 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, there is not specific written description/support which teaches that "the increased volatilization occurs for a period of from 17 minutes to about 72 minutes".

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-8, 10-15, 17-20 and 127 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 1 recites the limitation "the second perfume composition" in lines 16, 18 and 20. There is insufficient antecedent basis for this limitation in the claim.

7. Claims 6-8 recite the limitation "at a) and c)" in line 2. There is insufficient antecedent basis for this limitation in the claim.

8. Claim 13 recites the limitation "repeating b) and c)" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

9. Claim 14 recites the limitation "wherein a), b) and c)" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 1-4, 10-14, 18-20 and 128 are rejected under 35 U.S.C. 103(a) as being unpatentable over Falp (EP 0911041 A2) in view of Kearnes (4857240).

As to Claim 1, Falp ('041) discloses a method of flattening a perfume-release profile from a heated-wick perfume composition dispensing device (see entire document, particularly Claims 1 and 5-6, Abstract and paragraph [0045] in Cols. 5-6) comprising two or more perfume modules comprising at least a first and second reservoir containing a perfume composition, and at least a first and second wick in fluid communication with the perfume composition (see Col. 7, lines 10-14 - Claim 6), comprising:

a1) applying heat to the first wick to achieve a wick temperature sufficient to increase the rate of volatilization of at least one component of the perfume composition (see Col. 3, paragraphs [0020] and [0022]-[0023] and Cols. 5-6, paragraph [0045]);

b1) reducing the heat applied to the first wick to achieve a wick temperature sufficient to decrease the rate of volatilization of the at least one component of the perfume composition (see Col. 3, paragraphs [0021] and [0024]);

c1) maintaining the reduced heat for a time sufficient to allow for back-flow of at least one component of the perfume composition (see Col. 3, paragraph [0021]);

a2) automatically applying heat to the second wick to increase volatilization of at least one component of the second perfume composition (see entire document, particularly Col. 3 paragraph [0020], Col. 5 paragraphs [0037] and [0041], and Cols. 5-6 paragraph [0045]);

b2) reducing the heat applied to the second wick to a temperature sufficient to decrease volatilization of the at least one component of the second perfume composition (see Col. 3 paragraphs [0021] and [0024], and Figures 6-7);

c2) maintaining the reduced heat applied to the second wick for a time sufficient to allow for back-flow at least one component of the second perfume composition (see Col. 3 paragraph [0021] and Figures 6-7);

repeating a1) (see Col. 5 paragraphs [0037]-[0040], Cols. 5-6 paragraph [0045], and Figures 6-7); and

repeating a2) (see Col. 5 paragraphs [0037]-[0040] and Figures 6-7).

Falp ('041) does not appear to specifically teach that in steps c1) and c2) that the time sufficient to allow back-flow is greater than 15 minutes to about 48 hours.

It was well known in the art at the time of invention to provide an appropriate time interval for maintaining the reduced heat in a heated-wick perfume composition-dispensing device. Kearnes ('240) exemplifies a method of emitting fragrance vapor wherein volatilization of fragrance takes place for 8 or 12 hours and the maintaining

reduced volatilization state is for a period of 12 or 16 hours in order to optimize the operation of the fragrance dispenser (see entire document, particularly Col. 5 lines 1-14). Thus, it would have been obvious and well within the purview of one of ordinary skill in the art at the time of invention to adjust the timer of Falp to extend the period of heater off state to about 15 minutes to about 48 hours in order to optimize the operation of the fragrance dispenser as exemplified by Kearnes.

As to Claims 2-4, Falp ('041) discloses that the wick temperature sufficient to increase the rate of volatilization of at least one component of the perfume composition is greater than about 40°C, 60°C and 80°C (see paragraph [0021] in Col. 3).

As to Claims 10-12 and 128, while neither Falp ('041) nor Kearnes ('240) appears to specifically teach that the time sufficient to allow for back-flow of all or a portion of the components of the perfume composition is from about 17 minutes to about 72 minutes or about 20 minutes to about 60 minutes or about 30 minutes, Falp ('041) discloses that the duration and frequency of the heating is adjustable (see paragraph [0034] in Col. 4). Thus, it would have been obvious and well within the purview of one of ordinary skill in the art to provide the above time/duration in the method of Falp as modified by Kearnes by adjusting the setting of the controller/timer in order to provide desired emission frequency/intensity as is well known in the art during which time the perfume will have sufficient time to achieve back-flow. Only the expected results would be attained.

As to Claims 13-14, Falp ('041) discloses that the steps are repeated at least two times (see Col. 3 paragraphs [0020]-[0024], Cols. 4-5 paragraphs [0036]-[0040] and Figures 6-7).

As to Claims 18-19, Falp ('041) discloses that the performance of a1) and a2) does not overlap where the gap between performance of a1) and a2) is for a period of from about 0.1% to about 100% of the duration of a1) (see entire document, particularly Cols. 5-6 paragraph [0045], since the vaporization of a deodorant occurs during the day and a mosquito-specific insecticide takes place at night, the two heating steps do not overlap; in addition, there is a cooling periods – see Col. 5 paragraphs [0037]-[0040] and Figures 6-7, such cooling period is deemed to provide a gap between the two emission steps of about 0.1% to about 100% of the duration of a1)).

As to Claim 20, Falp ('041) discloses that the reduced heat is maintained for a time sufficient to allow for back-flow of all the components of the perfume composition (see entire document, particularly paragraph [0024] in Col. 3).

Thus, Claims 1-4, 10-14, 18-20 and 128 would have been obvious within the meaning of 35 U.S.C. 103(a) over the combined teachings of Falp ('041) and Kearnes ('240).

13. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Falp (EP 0911041 A2) in view of Kearnes (4857240) as applied to claim 1 above, and further in view of Hasegawa (4663315).

Falp ('041) and Kearnes ('240) are relied upon for disclosure described in the rejection of claim 1 under 35 U.S.C. 103(a).

While Falp ('041) discloses that the subsequent cooling keeps the wick at a low temperature (see Col. 3, paragraph [0024]), Falp ('041) does not appear to specifically teach what the low temperature is.

Hasegawa ('315) discloses a method of volatilizing a vaporizable composition from a wick (1) using a heater (4) where the heater is heated to heat the wick to a temperature sufficient to volatilize the vaporizable composition (see Col. 9 lines 24-29), where the wick temperature required to vaporize perfume composition is at minimum about 30°C (see Col. 9 line 28). It would have been well within the purview of one of ordinary skill in the art to provide a wick temperature of less than 30°C during the cooling period given that the wick temperature during the volatilization is above 30°C in order to reduce/decrease the rate of volatilization of the perfume composition. Only the expected results would be attained.

Moreover, it would have been obvious to one of ordinary skill in the art then that the temperatures disclosed by Hasegawa ('315) will provide a difference between wick temperatures at a) and c) from about 10°C to about 100°C or from about 20°C to about 80°C or from about 40°C to about 60°C (for example, the wick temperature upon heating is at 70°C (the lower most preferred heated wick temperature – see Col. 9 line

29) and the wick temperature after reduction of heat is 29°C (see Col. 9 line 28 where the highest possible wick temperature without heating is deemed at 29°C), the difference is 41°C) and it would have been obvious to one of ordinary skill in the art to provide such a temperature difference in the method of Falp in order to reduce the perfume release from the heated-wick perfume composition-dispensing device.

Thus, Claims 5-8 would have been obvious within the meaning of 35 U.S.C. 103(a) over the combined teachings of Falp ('041), Kearnes ('240) and Hasegawa ('315).

14. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Falp (EP 0911041 A2) in view of Kearnes (4857240) as applied to claim 1 above, and further in view of Pu (GB 2279010).

Falp ('041) and Kearnes ('240) are relied upon for disclosure described in the rejection of claim 1 under 35 U.S.C. 103(a).

Neither Falp ('041) nor Kearnes ('240) appears to specifically teach that in at least one repeated heating steps the temperature of the wick is higher than in the previous heating step.

Pu ('010) discloses that a heat controlling circuit (42) used for conducting heat to the heating mechanism (41) used to heat a wick (70) is comprised of a variable resistor (426) which controls the oscillating frequency where higher the frequency, the higher the temperature of the heating mechanism (see entire document, particularly p. 9 lines 1-27 and p. 10 lines 1-3) and this variable resistor (426) is used by the user to

adjust/control the heating system (see entire document, particularly p. 12 lines 10-15) In order to provide a higher wick temperature in at least one repeated heating steps than in the previous heating steps when the vaporizing temperature of a perfume composition used in one of the repeated heating steps is higher so as to control the vaporizing speed of the perfume composition to obtain a desired perfume gas density to provide/release gas with different densities.

As it was known in the art at the time of the invention to provide such heating mechanism with a heating controlling circuit in a heated-wick perfume composition-dispensing device, it would have been obvious to one of ordinary skill in this art at the time of invention to provide the heating mechanism/control circuit in the device and method of Falp in order to provide higher temperature to the wick in a second heating step compared to the previous heating step so as to obtain a desired perfume gas density as shown by Pu.

Thus, Claim 15 would have been obvious within the meaning of 35 U.S.C. 103(a) over the combined teachings of Falp ('041), Kearnes ('240) and Pu ('010).

15. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Falp (EP 0911041 A2) in view of Kearnes (4857240) as applied to claim 1 above, and further in view of Whitby (WO 01/05442).

Falp ('041) and Kearnes ('240) are relied upon for disclosure described in the rejection of claim 1 under 35 U.S.C. 103(a).

Neither Falp ('041) nor Kearnes ('240) appears to specifically teach that the performance of a1) and a2) overlaps for a period of from about 0.1% to about 100% of the duration of a1).

It was well known in the art at the time of invention to provide two heating steps that overlap for a period of time. Whitby ('442) exemplifies a method of perfume release from a heated-wick perfume composition-dispensing device (see Figure 1) comprising two perfume modules (2a, 2b) comprising at least a first and second reservoir containing a perfume composition (see Figure 1), and at least a first (8a) and second (8b) wick in fluid communication with the perfume composition (in 2a and 2b), wherein steps of applying heat to the first wick (8a) and applying heat to the second wick (8b) overlaps for a period of about 100% of the duration of the step of heating the first wick (8a) (see entire document, particularly p.7 lines 26-35, Example 2 on p. 9 and Claims 1-2 on p. 10) in order to increase the perception of the strength of perfume being emitted so as to overcome habituation by the user (see p.3 lines 13-33).

It would have been obvious to one of ordinary skill in this art at the time of invention to provide overlap of time period between the steps of heating the first wick and the second wick in the method of Falp in order to overcome the habituation of the user to the perfume being emitted as exemplified by Whitby.

Thus, Claim 17 would have been obvious within the meaning of 35 U.S.C. 103(a) over the combined teachings of Falp ('041), Kearnes ('240) and Whitby ('442).

16. Claim 127 is rejected under 35 U.S.C. 103(a) as being unpatentable over Falp (EP 0911041 A2) in view of Kearnes (4857240) as applied to claim 1 above, and further in view of Demarest (6361752).

Falp ('041) and Kearnes ('240) are relied upon for disclosure described in the rejection of claim 1 under 35 U.S.C. 103(a).

Neither Falp ('041) nor Kearnes ('240) appears to specifically teach that step a1) further comprises applying a fan to the wick for enhancing release of at least one component of the perfume composition.

It was well known in the art at the time of invention to apply a fan to a wick in a heated-wick perfume composition-dispensing device. Demarest ('752) exemplifies a heated-wick perfume composition-dispensing device and method wherein a fan (126) is applied to a wick (108) in order to enhance release of a perfume composition (106) (see Figure 7 and Col. 9 lines 26-35). It would have been obvious to one of ordinary skill in this art at the time of invention to provide a fan with the wick in the heated-wick perfume composition-dispensing device and method of Falp in order to enhance release of a perfume composition from the wick as exemplified by Demarest.

Thus, Claim 127 would have been obvious within the meaning of 35 U.S.C. 103(a) over the combined teachings of Falp ('041), Kearnes ('240) and Demarest ('752).

Response to Arguments

17. Applicant's arguments with respect to claims 1-8, 10-15, 17-20 and 127-128 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to REGINA YOO whose telephone number is (571)272-6690. The examiner can normally be reached on Monday-Friday, 10:00 am - 7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1797

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Elizabeth L McKane/
Primary Examiner, Art Unit 1797

RY